

Cherry Phone Inc.**Aufgaben**

The American smartphone manufacturer Cherry Phone Inc. is facing a rapid growth of sales. Its slogan “Cherry Phones: Designed in California“ is known all over the USA and Europe. Its primary target markets are Europe and the USA. Cherry Phone Inc. is a pure online player, meaning that the smartphones can only be ordered online. In the headquarters the management and the departments research and development, risk management, marketing, sales, purchasing, accounting and IT can be found.

- 1 Over the last decade, Cherry Phone Inc. has established an international supply chain. It also runs its own production divisions all over the world.
 - 1.1 With the help of material 1 describe the supply chain of Cherry Phone Inc. with regard to the information given about sourcing, manufacturing, warehousing and distribution.
(8 BE)
 - 1.2 The risk management department, located at Cherry Phone Inc.’s corporate headquarters, coordinates activities carried out by the production and distribution divisions. Identify four risks included in managing this international supply chain and establish a suitable measure the risk management department could implement in order to reduce each of these risks.
(8 BE)
 - 1.3 Cherry Phone Inc.’s business is growing rapidly. The factory in Taiwan which is assembling all the components is currently working at its capacity limit. Robots have been integrated in the system and the production has been re-organized in two manufacturing islands for assembling and for testing and packaging. Further capacity expansion in the factory cannot be realized in the short term.
 - 1.3.1 Before taking further measures, the production program shall be optimized under the existing production conditions. Calculate which of the two production islands is the company’s bottleneck and determine the optimum production program (material 2).
(14 BE)
 - 1.3.2 It’s Black Week and Cherry Phone Inc. decides to offer all models at a reduced price. Calculate the operating result per week if Cherry Phone Inc. offers a discount of 10 %.
(4 BE)

- 2 The HD cameras of the Cherry Phones are produced in the USA. Producing the cameras in-house costs USD 25 production material per camera, 14% material overheads, USD 8 production wages per unit and 50% production overheads. The shipping costs to Taiwan are USD 0.30 per unit. The fixed costs of in-house production amount to USD 86,000. The purchase price of the Taiwan supplier is USD 44 per camera including shipping. Cherry Phone Inc. needs 26,500 smartphone cameras per week.
- 2.1 In order to analyse the situation, a make-or-buy analysis is conducted. Determine the critical output mathematically. Interpret your result.
(10 BE)
- 2.2 Name four non-monetary advantages of making and buying the cameras which should be considered in this make-or-buy analysis. Establish a suitable advice whether the cameras should be bought or produced in-house.
(12 BE)
- 2.3 In the meeting of the management, the head of R&D states that “Offshoring is a threat to innovation”. Discuss this statement weighing three arguments.
(6 BE)
- 2.4 Identify possible economic, technological, logistical and legal motives (two each) for offshoring.
(8 BE)
- 3 Cherry Phone Inc. launches the campaign “phone now - pay later” and offers in its web shop a consumption credit at a zero percentage nominal interest rate. The credit has to be repaid at once at the end of the loan period (12 months or 24 months). There is an one-time handling fee of the credit which is 5% of the credit sum. It has to be repaid at the end of the credit term.
- 3.1 Calculate the effective interest rate for both options (12 months and 24 months) when financing the three smartphone models.
(8 BE)
- 3.2 Examine the influence of the credit fee on the effective interest rate in the case of a repayment term of 12 months and 24 months for the different models.
(4 BE)
- 3.3 Deduce disadvantages of a consumer credit from the company’s and consumers’ point of view (three each).
(6 BE)

4 Inflation in the US has jumped to the highest inflation rate since 2008 because the economy recovers positively from the Corona crisis. In addition shortages of raw materials and the rising costs for fossil fuels due to the war between Russia and Ukraine have also lead to rising prices.

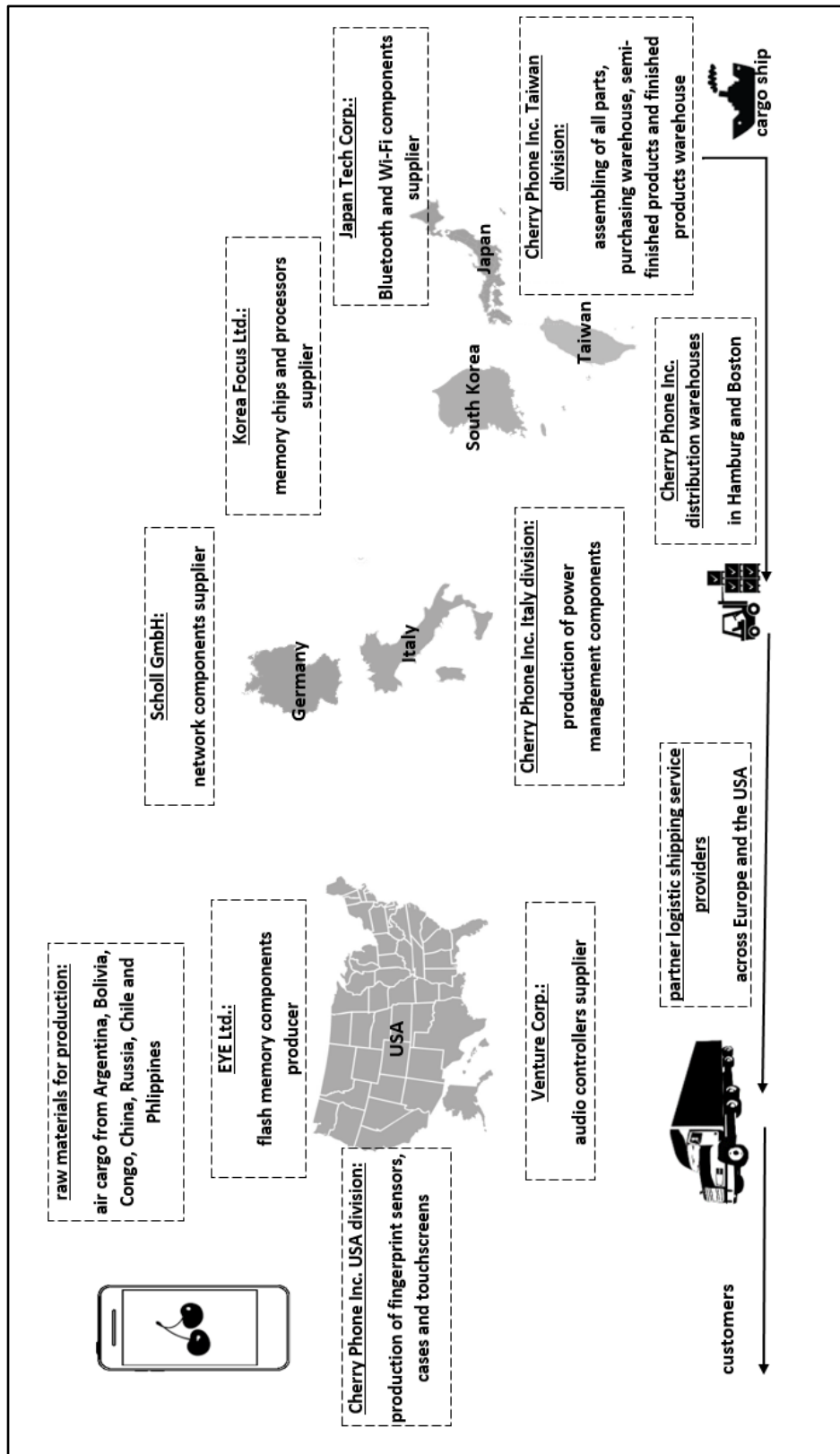
4.1 Explain the effects of a high inflation rate on the business of Cherry Phone Inc. and on the US consumers.

(4 BE)

4.2 Economists fear a so-called “wage-price-spiral”. Describe the concept and suggest two measures the Central Bank could implement to fight this process.

(8 BE)

Material 1

Overview of the International Supply Chain¹¹ source: own representation

Material 2

Sales and cost figures of Cherry Phone Inc.

	Cherry Call	Cherry Speed	Cherry XXL
Marketable units per week	7,600	9,800	4,300
Sales Price in USD	780.00	999.00	1,100.00
Variable costs per unit in USD	240.00	260.00	300.00
time production island 1 in minutes	3	2.5	4
time production island 2 in minutes	2	2	4
Total other fixed costs in USD	4,550,540.00		
Capacity production island 1 in hours per week	1,000		
Capacity production island 2 in hours per week	900		